

ABSTRACT

A system for treating a fluid stream containing contaminants is described. The system is comprised of a catalyst having a first flow path and a second flow path and an adsorbent bed positioned downstream from the catalyst. A flow diversion member is positioned to direct at least a portion of the fluid stream to or away from said adsorbent bed as the stream exits the catalyst. The stream is passed over said adsorbent bed until a predetermined operating parameter is reached, whereupon the position of the flow diversion member is moved to divert at least a portion of the stream away from the adsorbent bed and into the second flow path of the catalyst. A process for treating an exhaust fluid stream using the system is also described. The system and process find particular use in treating exhaust gas after cold-start, after restart, and during continuous operation of an engine.